

CHERRY



Introduction

- Occupy an important position among temperate fruits all over the world.
- Sweet cherry- table purpose
- Sour cherry – processing.
- Native of Europe and Western Asia
- **States: J & K and H.P.**
- In H.P., area under plum is **453** ha and production is **1039** MT.

Botany

- **Botanical Name:** *Prunus avium* (Sweet cherry)

Prunus cerasus (Sour cherry)

Family: Rosaceae

Recommended Cultivars

Black Tartarian, Bing, Napolean (white), Sam, Sue (White), Stella, Van, Lambert and Republican.

•The cultivar Lambert, a late flowering, can be planted in areas where spring frost is a problem.

Being prone to rain splitting, it should be cultivated in drier areas.

•Stella is a self- fertile cultivar.

Climate

- Cherries require colder climate than peaches and apricots.
- Chilling requirement is 1000 chilling hours.
- Hill slope is a preferable site where the cold air may drain down .
- The valleys with an outlet for the heavy cold air to move out are also suitable sites.
- Select a frost free site.
- In general, the sites located on North- eastern aspect at lower elevations are suitable..
- There should not be high rainfall at the time of flowering and towards the ripening period.

Soil

- Cherries require deep, fertile, well drained, gravely to sandy loam soils .
- The soils should not be waterlogged.

Rootstocks

- Paja (*Prunus cerassoides*)
- F 12/1
- Sour cherry
- Colt

Propagation Method

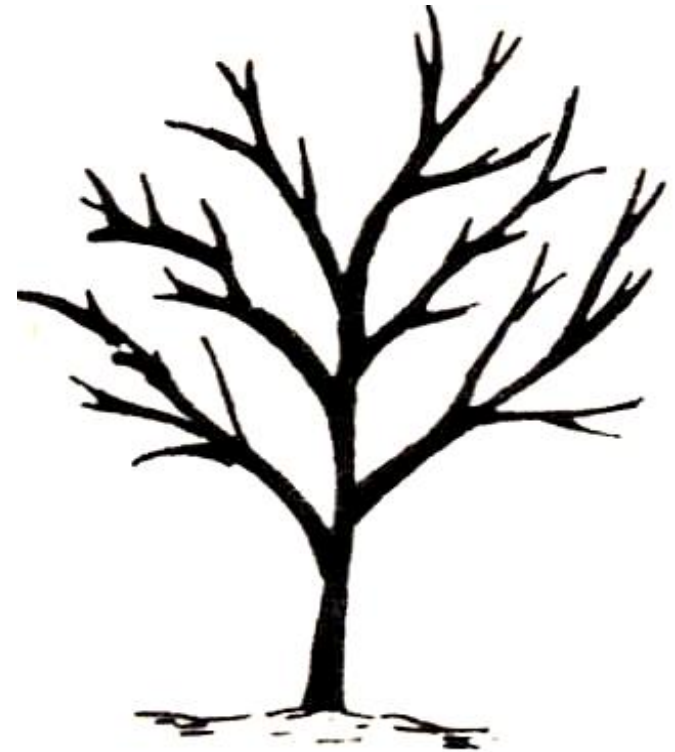
- Tongue grafting: January– February
- Cleft grafting : January– February (Top working method)
- T- budding : May- June

Planting

- **Distance** : 6x6m
- **Time** : December – February. Early planting is desirable

Training and Pruning

- **Modified Central Leader System of training.**
- **It requires more of corrective pruning than heading back or thinning of branches.**
- **While pruning, head back cuts of more than 2.5 cm in diameter should be avoided.**



Modified Central Leader

Orchard Soil Management

- Atrazine or Diuron @ 4.0 kg/ha is effective in controlling weeds for 4-5 months in plum orchards.
- Oxyfluorfen @ 0.5 kg/ha or Diuron @ 2.0 kg/ha is effective in plum nurseries.
- The herbicides should be applied in the month of April as pre-emergence to weeds.
- For post-emergence, application of gramoxone @ 2 L/ha or glyphosate @ 800 ml/ha (700 L water is sufficient for one hectare) is used in orchards.
- To conserve soil moisture, mulching of dry grass or hay 10-15 cm in thickness in the tree basin should be done.
- In orchards, where herbicides and mulching are used, 20 to 50 per cent economy in the use of nitrogen can be made and soil application of N, therefore, should be adjusted accordingly.

Manure and fertilizers

Age of tree (years)	FYM (kg)	CAN (g)	N (g)	SP (g)	P ₂ O ₅ (g)	MOP (g)	K ₂ O (g)
I	10	280	70	220	35	165	100
2	15	560	140	440	70	335	200
3	20	840	210	660	105	500	300
4	25	1120	280	880	140	670	400
5	30	1400	350	1100	175	835	500
6	35	1680	420	1320	210	1000	600
7 & above	40	2000	500	1560	250	1170	700

Method of fertilizer application

- **Apply FYM during Dec.- Jan. along with P and K**
- **Apply half N in spring before flowering and remaining half N one month later, if irrigation facilities are available.**
- **Under rainfed conditions, N fertilizer should be applied in one lot about 15 days before bud break.**

Pollination

- **A large number of sweet cherry cultivars are self- unfruitful and thus donot set crops with their own pollens.**
- **In addition to being self-incompatible, they are also cross-incompatible with some commercial cultivars.**
- **Thus, only compatible varieties can be inter planted to get commercial crops.**
- **Stella, which is a self- fruitful variety should preferably be used in the combination of varieties.**

Irrigation

- **The peak water use period is from middle of May to middle of June.**
- **The irrigation interval should be 12 days in May and 8-9 days in June.**
- **In all, 6 irrigations in a season are sufficient for plum orchards in mid- hill zone of the Pradesh.**

Harvesting & Yield

- Harvesting of the fruits is the most expensive operation associated with the production of cherries.
- Sweet cherry is picked with the stems (pedicels intact) unless they are to be delivered for processing.
- Handle the fruits carefully to avoid cuts and bruises.
- **Yield: 6-9 tones per hectare.**

Fruit Cracking and Splitting

- **Cracking of sweet cherry fruit due to rain near harvest is a major source of crop loss in the cherry industry.**
- **The disorder is characterized by a splitting of the outside layer of the cherry skin.**
- **The splitting most commonly appears around the stem bowl, where water can accumulate, but is also seen on other areas of the cherry cuticle.**
- **Bing cherries have a higher incidence of cracking while Van, Sweetheart, Lapins, Rainier and Sam are lower.**
- **Control: Spray CaCl_2 @ 300-350 g per 100 L water.**

Storage

- **Cherry can be stored for 2-3 weeks at a temperature of 0°C with 85-90% relative humidity.**